



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of )  
Yvin et al. )  
Serial No. : 10/668,661 ) Art Unit: 1623  
Filed: September 23, 2003 ) Examiner: Henry, Michael C.

For : Chemotherapeutical antineoplastic treatment.

DECLARATION UNDER RULE 132

To Honorable Commissioner of Patents and Trademarks  
Washington, D.C.

Sir :

I, VACLAV VETVICKA, of University of Louisville  
School of Medicine, Louisville, KY, USA,

solemnly declare

THAT I am graduated in biology and microbiology and  
I am Professor of Pathology;

THAT I am a named inventor of the present patent  
application n°10/668,661 and that I am fully familiar  
therewith;

THAT I have read and understood the Office Action of December 11, 2006 in connection with the present patent application ;

THAT, Sonifilan is derived from a fungus Schizophyllum and is a sulphated polysaccharide;

THAT, Sonifilan has a very high molecular weight of 265,000d ;

THAT Sonifilan presents a tridimensional helicoidal conformation;

THAT on the contrary, Laminarin has a molecular weight of about 6000d and is a linear non-sulphated polysaccharide;

THAT, due to said structural, chemical and molecular weight differences, results obtained with Sonifilan can never be extrapolated to Laminarin;

THAT, CHIBA et al. essentially discloses that zymosan and the beta-glucans have a common receptor on macrophages (in vitro data), which is trivial since Zymosan is known to contain beta-glucans;

THAT, in vivo, Chiba et al. discloses that, the administration of particular  $\beta$ 1-3 glucans, namely OL-2, SSG and GRN, (Laminarin was not tested) induced  $H_2O_2$  synthesis (Fig. 5) and phagocytosis of zymosan particles (Fig. 6), which measure the well-known activation of macrophages by beta-glucan treatments;

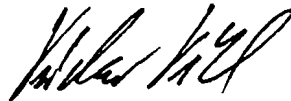
THAT, the activation of peritoneal macrophages by beta-glucans has no connexion with a possible activation of hematopoiesis which requires an effect on the bone marrow;

THAT, therefore the data disclosed in Chiba et al. can in no way infer that the beta-glucans, notably laminarin, can have an effect on the hematopoiesis of the animals/humans subjected to an hematotoxic challenge;

THAT, consequently, the man in the art, reading Chiba et al., can not conclude anything regarding laminarin and activation of hematopoiesis.

I, the undersigned, declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001, of Title 18, of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: *April 5, 2007*



Vaclav VETVICKA